Quantity Recap (1-1-2012)

Recap

Recap Erosion

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.		355.52
BITUM. TREATED ROV.	S.Y.		205.40
SOIL REINF. MATERIAL	S.Y.		356.00
PAVED DITCH	C.Y.		8.56
RIP RAP	TON		
SILT FENCE	L.F.	—SF—	404.70
GEOTEXTILE	S.Y.		
SOLID SOD	S.Y.		44.44
EROSION CHECKS	BALE		

This tool calculates all Erosion Control Items except Rip Rap, Geotextile, & Erosion Checks & places the quantities on the Erosion Control Stamp. Quantities can be calculated by sheet or the entire length of the project. Quantity Units are calculated as shown on the Erosion Control Stamp. Note that Solid Sod is calculated only when a Paved Ditch is present as shown on the Standard Drawing. Other factors are shown below.

Ditch Liner – 4' Wide, 0.4444 SY / LF

Bituminous Treated Roving 1' Depth

SLOPE (Foreslope/Backslope)	FACTOR (SY/LF)
3:1-3:1	0.703
4:1-3:1	0.809
6:1-3:1	1.027
4:1-4:1	0.916
6:1-4:1	1.134
6:1-6:1	1.351

Soil Reinforcemet Mat DT-1A

SLOPE (Foreslope/Backslope)	FACTOR (SY/LF)
3:1-3:1	0.89
4:1-3:1	0.89
6:1-3:1	0.89
4:1-4:1	0.89
6:1-4:1	0.89
6:1-6:1	1.22

Paved Ditch D=9"

SLOPE (Foreslope/Backslope)	FACTOR (SY/LF)

3:1-3:1	0.0586
4:1-3:1	0.0675
6:1-3:1	0.0856
4:1-4:1	0.0764
6:1-4:1	0.0945
6:1-6:1	0.1126

Individual Sheet Calculation Steps

1. Enter each plan sheet.
2. Place Fence around Plan Portion of sheet & Fence Clip Copy to location above sheet.
3. Turn Pattern Display Off (Settings -> View attributes ->Toggle Off Patterns -> Apply
4. Use Element Selection to Select Erosion Control Items of this copied Plan.
5. Run 3PC RECAP EROSION
6. When prompted “DP TO EROSION CONTROL CELL ORIGIN”, Select ORIGIN SNAP & snap to & DP the cell origin of the Erosion Control Stamp in Referenced Plan.
7. Enter Plan & Profile Scale, (100, 20).
8. Choose Projects normal Foreslope/Backslope.
9. Quantities are calculated.

Total Erosion Control Calculation

1. Enter Design file that contains Erosion Control Items & place Erosion Control Stamp.
2. Turn Pattern Display Off (Settings -> View attributes ->Toggle Off Patterns -> Apply
3. Select All Erosion Control Items with Element Selection.
4. Perform steps 5-8 above.

Recap Inlets

Recaps Selected Inlets to format shown below. Concrete & Steel values are pulled from Inlets placed by Place Inlets (Plan View) 3PC command.

Recap Inlets – Recaps selected Inlets in format shown below.

0000000000	1111111111	2222222222	3333333333	4444444444	5555555555	6666666666	77777777777777	8888888888	999999999
CHAIN	STA	TYPE	LENGTH	WIDTH	HEIGHT	OPENINGS	CONC(CY)	STEEL(LB)	
398.74	ali51a	416+70R	SS2	15	3.0	4.08	1@24",1@18"	2.879	367
428.74	ali51a	417+00L	SS4			3.92	1@18"	0.670	31
428.74	ali51a	417+00R	MI3			4.00		0.832	102
503.74	ali51a	417+75L	SS2	10	3.0	4.08	1@18",1@24"	1.989	257

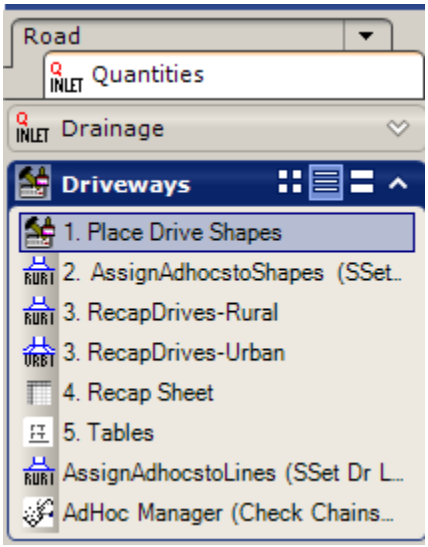
Recap Signs

This tool counts the number of Traffic Control Signs & fills out the Estimated Quantities Sheet for Traffic Control Signs. It is **important** when you are placing signs for Traffic Control that you manage your reference files for Traffic Control Phases so that when the phases are all referenced into to one design file, no duplicate signs exist.

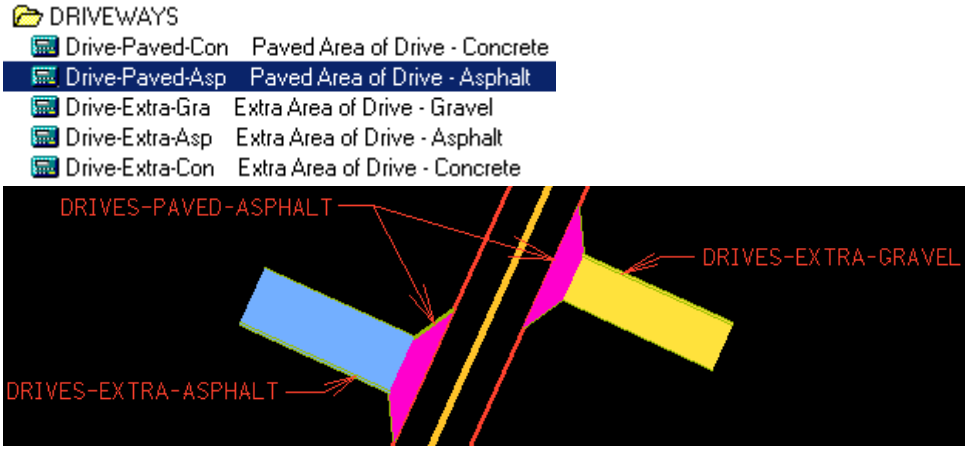
STEPS

1. Create a Quantity DGN file Q-Signs.dgn
2. Reference in all Phases of Traffic Control. If there are any signs that will be used more than once on a project, you need to enter the appropriate Phase DGN file and run the 3PC Assign-DontCnt which assigns the Adhoc Count = NO to selected elements (Signs) so these signs will not be counted.
3. Place the Estimated Quantities for Traffic Control Signs Sheet. (At 100 Scale)
4. Select all Traffic Control Signs with Element Selection. (Signs are on LV = 23(SIGNS)). I would Turn Off all Reference file Levels except 23.
5. Run the 3PC RECAP SIGNS.
6. At the prompt “DP SIGN SHEET CELL ORIGIN” Select ORIGIN SNAP & snap to & DP the cell origin of the Estimated Quantities for Traffic Control Signs Sheet

Recap Drives

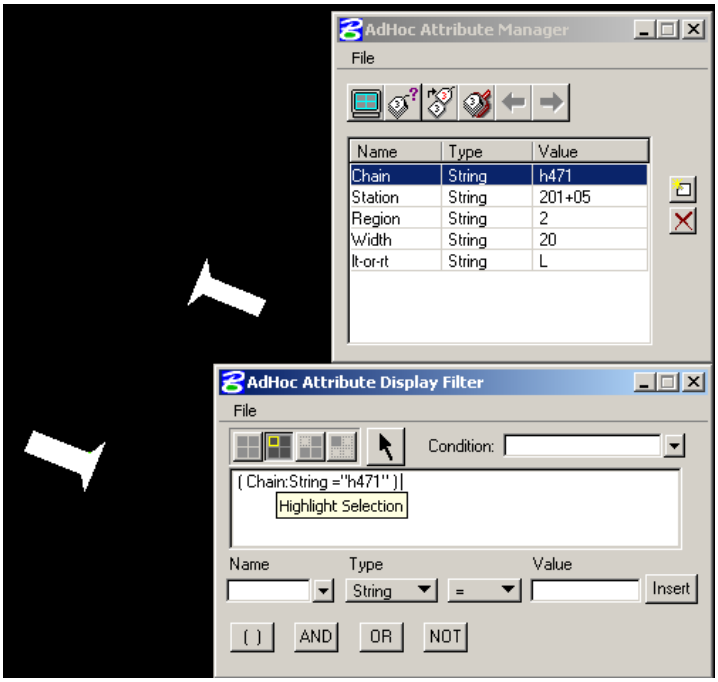


1. Place Drive Shapes – Place drive shapes with D&C Manager



2. Assign Dr Shapes – Basically copies Adhoc Values from Driveway Lines (Adhocs are assigned when Drives are placed by GeoPak 3PC to Drive Shapes placed through D&C Manager. Select Drive elements and Drive Shapes (LV's TRANS_DRIVES & QUAN_DRIVES) prior to running. It is a good idea to Invoke GeoPak's Adhoc Manager to check to see if Adhocs are assigned.

   Note: If Drives were not placed with 3PC (from Road Menu), you need to assign Adhoc Values to the Drive Lines by Selecting Drives associated with 1 chain and running AssignAdhocstoLines prior to the Assign Dr Shapes. Parallel Drive Line for each Drive will be assigned Adhoc's. Process for each Chain.



3. Recap Drives-Urban

Looks at SELECTED Driveway Shapes placed through D&C Manager and assigned Adhoc Drive info to calculate pavement & granular quantities and place in Q-DRIVES-URBAN-chainname.PLT file as shown below. This info can be transferred straight to a Recap Block via GeoPak's Tables Application. You select all drive shapes on project before running. The app will sort the drives along the ML chain specified and you may need to edit the .PLT file to get the LR Drives in the correct location. You also need to replace the Chain Names with WK NO's.

Q-DRIVES-URBAN-chainname.PLT

1111111	222222222222	3333333	44444444444	55555555555	6666666666666	7777777777777	8888888888888	999999999999999999	AAAAAAAAAAAAAAAAAAAA
WKNO	STA	WIDTH	AREA(SY)	ExtraAreaSY	ASPHALT1(TON)	ASPHALT2(TON)	CONCRETE(SY)	GRAN.MAT.(CY)	REMARKS
h471	175+50R	20	18.19	84.44			18.19	14.07	
h471	176+15L	16	15.08	67.56	5.57	5.57	15.08	11.26	ASPHALT DRIVE REQ
h471	183+50L	20	18.07	95.62			18.07	15.94	
lrhunter	6+00L	16	15.24	23.06			38.30	3.84	CONCRETE DRIVE REQ
h471	201+05L	30	47.88	110.00			47.88	18.33	

RECAP

DRIVEWAYS REQUIRED

WK. SH. NO.	STATION	WIDTH	PAVED AREA (SQ.YDS.)	EXTRA AREA (SQ.YDS.)	ASPHALT ---",--mm	ASPHALT ---",--mm	CONCRETE (SQ.YDS.)	GRAN. MAT. CL. - , GRP -	REMARKS
wk3	175+50R	20	18.19	84.44			18.19	14.07	
wk3	176+15L	16	15.08	67.56	5.57	5.57	15.08	11.26	ASPHALT DRIVE REQ
wk4	183+50L	20	18.07	95.62			18.07	15.94	
wk4a	6+00L	16	15.24	23.06			38.30	3.84	CONCRETE DRIVE REQ
wk5	201+05L	30	47.88	110.00			47.88	18.33	

3. Recap Drives-Rural

Runs basically the same as the Urban Recap Drive except it searches for PAVED ASPHALT area. PLT file created is same format as Urban. NOTE: You have to run Assign Drive Shapes to assign Driveway Adhoc values to shapes prior to running.

Recap Removal – Pipes

Recaps Pipes to be Removed and creates .PLT file as shown below which can be be transferred straight to Pipe Removal Recap Block after WK. NO.'s are inserted in place of chain name.

Step 1. Select the pipes to be removed that are associated to your mainline chain and then run the 3PC ASSIGN-REMOVE which assigns Adhoc values of the chain name and Remove=Yes.
Step 2. Perform Step 1 for each alignment that has pipes to be removed.
Step 3. Select all Ex. Pipes and run the 3PC "Recap RemPipe" to create the .PLT file(Q-PIPES-REMOVAL-job#.PLT. Enter ML Chain when prompted.

1111111	*2222222222*	*3333333333*	*4444444*	*5555555555555555*
WKNO	*STA*	*TO STA*	*LENGTH*	*REMARKS*
h471	*176+35.1L*	*176+74.6L*	*40*	*30"*
h471	*177+10.9R*	*177+44.9R*	*34*	*30"*
h471	*178+52.5L*	*178+87.3L*	*35*	*18"*
lrfirst	*4+44.0R*	*4+45.9L*	*35*	*18"*
h471	*180+77.3L*	*181+16.3L*	*39*	*18"*
h471	*182+65.2R*	*183+04.7R*	*39*	*18"*
h471	*183+83.8L*	*184+20.0L*	*37*	*18"*
h471	*188+64.2L*	*189+04.2L*	*40*	*24"*
h471	*190+93.3L*	*191+26.0L*	*33*	*24"*
lrhunter	*8+51.8R*	*8+38.3L*	*50*	*30"*

Step 4. Edit the .PLT file and replace the Chain Names with the WK.NO.'s and check the make sure of order of pipes. Add Pipe Type to Remarks if known.

1111111	*2222222222*	*3333333333*	*4444444*	*5555555555555555*
WKNO	*STA*	*TO STA*	*LENGTH*	*REMARKS*
WK3	*176+35.1L*	*176+74.6L*	*40*	*30" RCP*
WK3	*177+10.9R*	*177+44.9R*	*34*	*30" RCP*
WK3	*178+52.5L*	*178+87.3L*	*35*	*18" RCP*
WK3A	*4+44.0R*	*4+45.9L*	*35*	*18" RCP*
WK4	*180+77.3L*	*181+16.3L*	*39*	*18" CMP*
WK4	*182+65.2R*	*183+04.7R*	*39*	*18" CMP*
WK4	*183+83.8L*	*184+20.0L*	*37*	*18" CMP*
WK5	*188+64.2L*	*189+04.2L*	*40*	*24" CMP*
WK5	*190+93.3L*	*191+26.0L*	*33*	*24" RCP*
WK5A	*8+51.8R*	*8+38.3L*	*50*	*30" CMP*

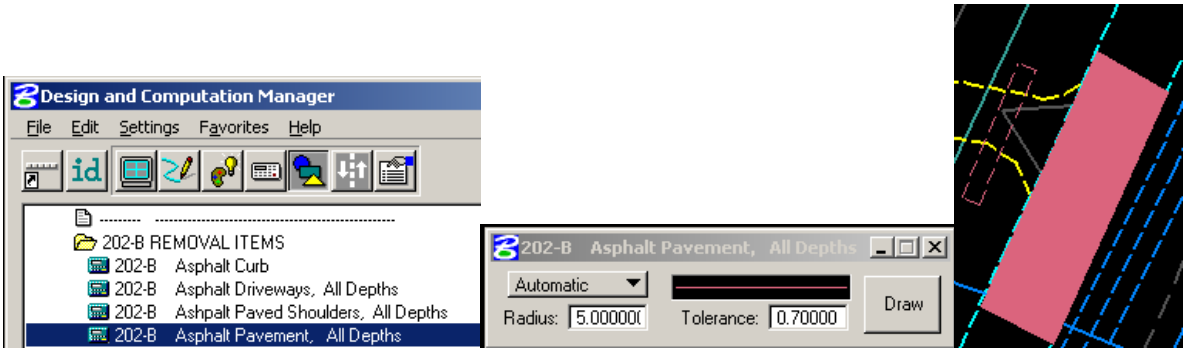
Step5. Place Pipe Removal info on Pipe Removal Recap Blocks through GeoPak's Tables Application.

REMOVAL OF PIPES				
WORK. SH. NO.	STATION TO STATION		LIN. FT.	REMARKS
WK3	176+35.1L	176+74.6L	40	30" RCP
WK3	177+10.9R	177+44.9R	34	30" RCP
WK3	178+52.5L	178+87.3L	35	18" RCP
WK3A	4+44.0R	4+45.9L	35	18" RCP
WK4	180+77.3L	181+16.3L	39	18" CMP
WK4	182+65.2R	183+04.7R	39	18" CMP
WK4	183+83.8L	184+20.0L	37	18" CMP
WK5	188+64.2L	189+04.2L	40	24" CMP
WK5	190+93.3L	191+26.0L	33	24" RCP
WK5A	8+51.8R	8+38.3L	50	30" CMP

Recap Removal – Pavement

Recaps Pavement to be Removed and creates .PLT file as shown below which can be be transferred straight to Pavement Removal Recap Block after WK. NO.'s are inserted in place of chain name. NOTE: Pavement Areas do not need to extend past each Sheet Border or Quantities will cover more than one WK Sheet.

Step 1. Place the appropriate Shape Removal Area through D&C.



Step 2. Select the shapes to be removed that are associated to your mainline chain and then run the 3PC ASSIGN-REMOVE which assigns Adhoc values of the chain name and Remove=Yes.
Step 3. Perform Step 2 for each alignment that has pavement to be removed.
Step 4. Select all Pavement Removal Shapes and run the 3PC "Recap Rem Pave" to create the .PLT file(Q-PAVE-REMOVAL-job#.PLT. Enter ML Chain when prompted.

```
1111111   2222222222   3333333333   44444444   55555555   66666666   77777777   8888888888888888888
   WKNO          STA       TO STA    ASPHALT   CONCRETE   CON-ASPH   SOIL_CEM                REMARKS
   h471     180+43.5     181+35.3      179.46
   h471     191+34.7     193+45.6                                452.58
lrhunter      12+03.7      12+21.2                  302.49
   h471     196+53.8     197+92.9      292.49
```

Step 5. Edit the .PLT file and replace the Chain Names with the WK.NO.'s and check the make sure of order of pipes. Add Pipe Type to Remarks if known. Check Stations also because exact BEG & END Stations are not always returned with Complex Shapes.

1111111	2222222222	3333333333	44444444	55555555	66666666	77777777	88888888888888888
WKNO	STA	TO STA	ASPHALT	CONCRETE	CON-ASPH	SOIL_CEM	REMARKS
WK4	180+43.5	181+35.3	179.46				
WK5	191+34.7	193+45.6			452.58		
WK5A	12+03.7	12+21.2		302.49			
WK6	196+53.8	197+92.9	292.49				

Step6. Place Pavement Removal info on Pavement Removal Recap Blocks through GeoPak's Tables Application.

REMOVAL OF PAVEMENT

WORK. SH. NO.	STATION TO STATION		ASPHALT	CONCRETE	CONCRETE OVERLAYED W/ASPHALT	SOIL CEMENT	REMARKS
WK4	180+43.5	181+35.3	179.46				
WK5	191+34.7	193+45.6			452.58		
WK5A	12+03.7	12+21.2		302.49			
WK6	196+53.8	197+92.9	292.49				